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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/791,051	03/02/2004	Victor ChiSiang Choo	STL11375	2836
27365	7590	05/30/2008	EXAMINER	
SEAGATE TECHNOLOGY LLC C/O WESTMAN CHAMPLIN & KELLY, P.A. SUITE 1400 900 SECOND AVENUE SOUTH MINNEAPOLIS, MN 55402-3244			KIM, PAUL D	
		ART UNIT	PAPER NUMBER	3729
		MAIL DATE	DELIVERY MODE	05/30/2008 PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/791,051	CHOO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Paul D. Kim	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 11 March 2008.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 16-35 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 16,17,21-27,29 and 31-35 is/are rejected.

7) Claim(s) 18-20, 28 and 31 is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .	6) <input type="checkbox"/> Other: _____ .

## **DETAILED ACTION**

This office action is a response to the restriction requirement filed on 3/11/2008.

### ***Election/Restrictions***

1. Applicant's election of Group I, claims 16-27 and 35 with amended claims 28-34, in the reply filed on 3/11/2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "engaging the inner portion of the clamp through a slot between flange segments of the flange to remove the clamp" as recited in lines 2-3 renders the claim vague and indefinite. It is unclear as to how the clamp is removed by engaging the inner portion of the clamp through a slot between flange segments of the flange.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 16, 17, 21-27, 29 and 31-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Ng (US PAT. 7,215,509).

Ng teaches a process of clamping storage media comprising steps of: supplying an outward force in a first direction (194, Y-direction) to an inner portion (154) of a clamp (200); and supplying a clamping force in a second direction (196, X-direction) different from the first direction to install the clamp over a flange of a clamping interface (138) as shown in Figs. 7-12 (see also col. 7, line 13col. 8, line 38).

As per claim 16 the clamping interface includes a spindle portion (108, as shown in Fig. 1) rotatable relative to a hub and at least one disc (110) is assembled relative to the spindle portion prior to supplying the force to install the clamp as shown in Figs. 4-9.

As per claim 22 the inverted spring portion of the clamp is snap fitting into the groove of the clamping interface as shown in Fig. 4.

As per claim 23 then inner portion of the clamp is engaged along a sloped surface of an assembly tool (192) to supply the outward force to the inner portion prior to supplying the clamping force as shown in Fig. 7.

As per claim 24 the assembly tool is moved toward the clamping interface prior to supplying the clamping force as shown in Figs. 7 and 8.

As per claim 25 the clamp includes a plurality of tabs (154) spaced about an inner circumference of the clamp and the assembly tool engages one or more of the plurality of tabs to bias the inverted spring portion of the clamp outwardly to install the clamp over a flange of the clamping interface as shown in Fig. 8.

As per claim 26 the clamping force is supplied while inner (190) and outer tools (192) engages the inner and outer portions of the clamp as shown in Fig. 8.

As per claims 27 and 31 the clamping interface is formed on a spindle assembly (108 as shown in Fig. 1) and one or more discs on the spindle motors prior to supplying the clamping force as shown in Figs. 4-9.

As per claim 29 the outward force is supplied to the inner portion of the clamp prior to supplying the clamping force as shown in Figs. 8 and 9.

As per claim 30 the outer force is supplied via an assembly tool and the outward force is released following application of the clamping force so that the clamp engages the flange of the clamping interface as show in Fig. 9.

As per claim 32 the clamp is moved along a sloped surface of an assembly tool to supply outward force to the inner portion of the clamp so that the clamp fits over the flange on the clamping interface and the clamping force is apply to the clamp spaced form the inner portion of the clamp to release the clamp from the assembly tool to snap fit the clamp into a groove of the clamping interface.

As per claim 33 at least one disc assembled on a ledge surface of the clamping interface and the clamp is snap fitting into the groove of the clamping interface having a surface recessed below the ledge surface of the clamping interface as shown in Fig. 9.

As per claim 34 the invert spring portion (154) of the clamp is snap fitted into the groove

As per claim 35 the first direction is generally transverse to the second direction as shown in Fig. 7.

#### ***Allowable Subject Matter***

6. Claim 17 is would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

7. Claims 18-20, 28 and 31 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

8. Applicant's arguments filed 3/11/2008 have been fully considered but they are not persuasive. Applicant argues that the prior art of record, Ng, fails to disclose the claimed invention such as supplying an outward force in a first direction and supplying a clamping force in a second direction different from the first direction. Examiner traverses the argument. According to the Fig. 7, an outward force is supplied in a first direction

(194, up or down in Y-direction) to an inner portion (154) of a clamp (200); and supplying a clamping force in a second direction (196, left or right in X-direction), which is different from the first direction. The clamping force of the clamp is supplied by the tool to retain the clamp. In addition, when the outwardly force (Y-direction) is applied to the clamp, then the clamping force (X-direction) is supplied. Also, applicant argues that the prior art of record, Ng, fails to disclose to move the clamp along a sloped surface of an assembly tool to supply outward force to the inner portion of the clamp. According to the Fig. 8 and 9, the clamp moves along a sloped surface of an assembly tool to supply outward force to the inner portion of the clamp.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565. The examiner can normally be reached on Monday-Thursday between 6:00 AM to 2:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Paul D Kim/  
Primary Examiner, Art Unit 3729